

Code No: 115EG

**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD****B. Tech III Year I Semester Examinations, July/August - 2023****MANAGERIAL ECONOMICS AND FINANCIAL ANALYSIS****(Mechanical Engineering)****Time: 3 hours****Max. Marks: 75**

- Note:** i) Question paper consists of Part A, Part B.  
ii) Part A is compulsory, which carries 25 marks. In Part A, Answer all questions.  
iii) In Part B, Answer any one question from each unit. Each question carries 10 marks and may have a, b as sub questions.

**PART - A****(25 Marks)**

- 1.a) State law of diminishing marginal utility. [2]
- b) What are the assumptions of the law of demand? [3]
- c) Define production function. [2]
- d) Briefly compare accounting costs and economic costs. [3]
- e) What is the essential difference between private limited company and public limited company? [2]
- f) What do you understand by the term, 'perfect market'? [3]
- g) Define IRR. [2]
- h) What is debenture? What are the types of debentures? [3]
- i) Define debtor's turnover ratio. [2]
- j) Distinguish between capital and revenue items, illustrating your answer with examples. [3]

**PART - B****(50 Marks)**

- 2.a) Construct demand schedule for a product for alternative prices of Rs.1, Rs.2, Rs.3, Rs.4, and Rs.5 given its demand function.  
 $D = 90 - 2P$ .
- b) What are demand determinants? [5+5]

**OR**

- 3.a) Briefly explain the relevance of managerial economics to engineers.
- b) How do you use the moving average method for demand forecasting? [5+5]

4. Bring out the relation between long run average cost curve and short run average cost curve and explain. [10]

**OR**

- 5.a) Calculate the break-even point in units and rupees from the following data:  
Contribution margin ratio : 30 percent  
Contribution margin per unit: Rs. 6.00  
Fixed cost per month : Rs. 20,000
- b) With the relevant data as above, if the net profit is Rs.60,000. What is the amount of sale in Rupees? [5+5]

- 6.a) What is sealed bid pricing? Where do you come across it?  
 b) What are the important features of cooperative form of organization? [5+5]

**OR**

- 7.a) What are the contents of Memorandum of Association?  
 b) What is monopolistic market? What are its features? [5+5]

- 8.a) There are two projects A and B. The cost of the project is Rs.36,00,000 in each case. The cash inflows are as under.

year	Cash inflows for project A in Rs.	Cash inflows for project B in Rs.
1	16,00,000	12,00,000
2	12,00,000	12,00,000
3	16,00,000	26,00,000

Using Payback period method if you have to choose only one of them, which will you and why?

- b) What constitutes working capital? What is its importance to business? [5+5]

**OR**

- 9.a) A company has the following investment opportunities:

proposals	Initial outlay	Profitability index
1	20,00,000	1.15
2	12,50,000	1.13
3	17,50,000	1.11
4	15,00,000	0.08

The available funds are Rs.30,00,000. Which proposals the firm should accept? Justify your answer.

- b) What are the limitations of payback method of evaluation of project proposals? [6+4]

- 10.a) What are the advantages of double entry system of accounting?

- b) A firm makes sales of Rs. 50,00,000 for the year of which 60% is on credit basis. The balance of debtors at the beginning and the end of the year were Rs. 4,00,000 and Rs. 3,00,000 respectively. Calculate debtor's turnover ratio and debt collection period.[4+6]

**OR**

- 11.a) If cost of the annual goods sold is Rs.16,50,000 and the opening stock is Rs. 2,50,000 and the closing stock Rs. 3,50,000 calculate the inventory turnover ratio.

- b) What are the errors revealed and not revealed on drawing trial balance account? [4+6]

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